AMENDMENT UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2178
PATENT
Application # 10/666,227
Attorney Docket # 2002P15657US01 (1009-040)

AMENDMENTS

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for configuring HMI user screen navigation comprising the activities of:

   providing an HMI screen navigation editor to a user;

   via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;

   responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and ~~another~~ a leaf node of said parent node, automatically adjusting a position of said parent node repeatedly until no collisions are detected, said collision detected based upon a calculated position of said parent node and a calculated position of said leaf node; and

   rendering the collection to the user. .

2. (Original) The method of claim 1, further comprising:

   receiving from the user a specification of an HMI root screen node.

3. (Original) The method of claim 1, further comprising:

   receiving from the user a specification of an HMI child screen node, the HMI child screen node a descendent of an HMI root screen node.

4. (Original) The method of claim 1, further comprising:

   receiving from the user, a specification of a relationship between two of the plurality of HMI screen nodes.

5. (Original) The method of claim 1, further comprising:

   receiving from the user a specification of an organization of the collection.

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6. (Original) The method of claim 1, further comprising:
    receiving from the user a specification of a hierarchy of the collection.

7. (Previously Presented) The method of claim 1, further comprising:
    automatically determining an arrangement of the collection.

8. (Original) The method of claim 1, further comprising:
    receiving from the user a specification of a size the plurality of HMI screen nodes.

9. (Original) The method of claim 1, further comprising:
    zooming a rendition of the plurality of HMI screen nodes.

10. (Original) The method of claim 1, further comprising:
    panning a rendition of the plurality of HMI screen nodes.

11. (Original) The method of claim 1, further comprising:
    collapsing a rendition of the plurality of HMI screen nodes.

12. (Original) The method of claim 1, further comprising:
    expanding a rendition of the plurality of HMI screen nodes.

13. (Original) The method of claim 1, further comprising:
    rotating a rendition of the plurality of HMI screen nodes.

14. (Currently Amended) The method of claim 1, further comprising:
    rendering a portion of a-the plurality of HMI screen nodes.

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15. (Original) The method of claim 1, further comprising:

enabling the user to revise the collection.

16. (Original) The method of claim 1, further comprising:

enabling the user to revise at least one of the plurality of HMI screen nodes.

17. (Original) The method of claim 1, further comprising:

receiving a user specification of an attribute of an HMI screen node.

18. (Original) The method of claim 1, further comprising:

receiving a user specification of an attribute of the collection.

19. (Currently Amended) The method of claim 1, further comprising:

receiving from a the user a specification of a link between two HMI screen nodes.

20. (Currently Amended) The method of claim 1, further comprising:

receiving from a the user a specification of a link from a first HMI screen node to a
second HMI screen node, the second HMI screen node non-familial to the first HMI screen node.

21. (Original) The method of claim 1, further comprising:

rendering a link between two HMI screen nodes;

22. (Original) The method of claim 1, further comprising:

rendering a link from a first HMI screen node to a second HMI screen node, the second
HMI screen node non-familial to the first HMI screen node.

23. (Currently Amended) The method of claim 1, further comprising:

receiving from a the user a specification of a navigation control comprising at least one

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HMI screen link.

24. (Original) The method of claim 1, further comprising:

rendering a navigation control comprising at least one HMI screen link.

25. (Currently Amended) The method of claim 1, further comprising:

receiving from a-the user a specification of a navigation control comprising at least one

button.

26. (Original) The method of claim 1, further comprising:

rendering a navigation control comprising at least one button.

27. (Currently Amended) The method of claim 1, further comprising:

receiving from a-the user a specification of a navigation control comprising at least one

button, the at least one button comprising an HMI screen link.

28. (Original) The method of claim 1, further comprising:

rendering a navigation control comprising at least one button, the at least one button

comprising an HMI screen link.

29. (Currently Amended) The method of claim 1, further comprising:

receiving from a-the user a specification of a navigation control comprising at least one

button, the at least one button comprising an HMI screen link, the at least one button activatable

via a user-specified soft key.

30. (Original) The method of claim 1, further comprising:

rendering a navigation control comprising at least one button, the at least one button

comprising an HMI screen link, the at least one button activatable via a user-specified soft key.

31. (Currently Amended) The method of claim 1, further comprising:

receiving from a-the user a specification of a navigation control comprising at least one element activatable via a user-specified soft key.

32. (Original) The method of claim 1, further comprising:

rendering a navigation control comprising at least one element activatable via a user-specified soft key.

33. (Currently Amended) A machine-readable medium containing instructions for activities comprising:

providing an HMI screen navigation editor to a user;

via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;

responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and another-a leaf node of said parent node, automatically adjusting a position of said parent node repeatedly until no collisions are detected, said collision detected based upon a calculated position of said parent node and a calculated position of said leaf node; and

rendering the collection to the user.

34. (Currently Amended) A device for providing a representation of user screens for an HMI comprising:

an HMI screen navigation editor operatively adapted to:

enable a user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;

responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and another-a leaf node of said parent node,

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automatically adjust a position of said parent node repeatedly until no collisions are detected, said collision detected based upon a calculated position of said parent node and a calculated position of said leaf node; and

render the collection to the user.

35. (New) The method of claim 1, further comprising:

receiving from the user, a user-drawn relationship indication line between two of the plurality of HMI screen nodes.

36. (New) The method of claim 1, further comprising:

automatically determining an arrangement of the collection based upon a user specified upper limit on inter-generational spacing.

37. (New) The method of claim 1, further comprising:

receiving a user specification of an attribute of an HMI screen node, the attribute adapted to change a background color of a screen.

38. (New) The method of claim 1, further comprising:

rendering a navigation control comprising a button adapted to display a previously viewed screen in a sequence of screens.

39. (New) The method of claim 1, further comprising:

rendering a navigation control comprising a button adapted to display a subsequent screen in a sequence of screens.